

Committee on Women in Industry
of the
Advisory Commission
of the
Council of National Defense.

The Manufacture of Army Shirts
Under the Home Work System.
Jeffersonville, Indiana.

WOMEN IN WAR INDUSTRIES SERIES, No. 1.

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COMMITTEE ON LABOR.

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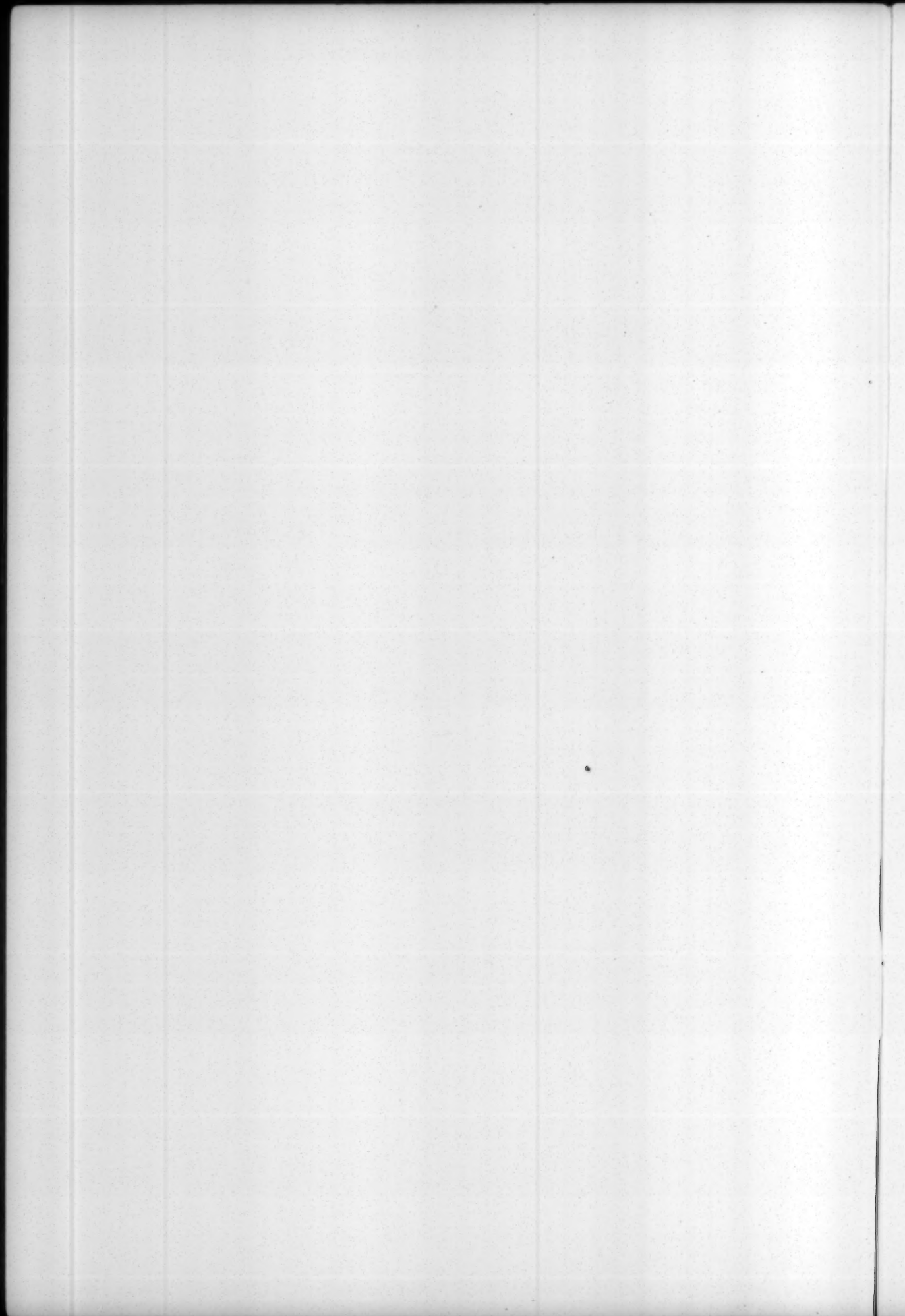
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PREFACE.

The present war has emphasized the need of many changes and especially is this true in the field of production. Large output, high grade product and elimination of waste of time and material require the most efficient and highly organized methods of production.

The War Department was one of the first of the Government departments to appreciate this need. Shortly after the declaration of war with Germany, a Board for the Administration of Labor Standards for Army Clothing was created in the Quartermaster General's Department to establish and maintain standards for the manufacture of uniforms in the establishments receiving government contracts. The first achievement of the Board was the removal of all uniforms for privates from the tenements of New York City.

Recommendations for Depot Quartermasters, Inspectors, and Manufacturers in Circular No. 18 were issued by the Quartermaster General, November 19, 1917. These recommended standards for hours of labor; conditions of work-rooms; wages; negotiations between employers and employees; and employment of women and minors. A similar order was issued by the Chief of Ordnance in General Orders No. 13 on November 15, 1917. Both go on record as opposing work being done in rooms used for living purposes in dwellings or tenements.

In two centers, the Schuylkill Depot in Philadelphia and the Quartermaster's Depot at Jeffersonville, Indiana, opposite Louisville, Kentucky, about one-third of the army shirts are still made under the old system of home work production dating back to the Civil War. The Government Depot buys and cuts the materials which are distributed to women who take them home and make them into garments. When returned to the depot the garments are inspected, fumigated, baled and shipped to the camps.

This report, which was made by the Committee on Women in Industry, describes the processes of manufacture of army shirts under the home work system in Jeffersonville, Indiana and contains the recommendations of the Committee.

The Government policy is in favor of manufacturing in establishments where the conditions of employment can be controlled.

On account of the pressure of immediate war needs, every agency previously created by the Government has been utilized. The home work manufacture of shirts has therefore increased enormously during the past year. It is hoped, however, that all the army shirts may soon be made under more productive and efficient methods of manufacture in establishments equipped with up-to-date machinery, subject to state inspection, which will afford a fairer compensation to the worker and protection to the soldier.

Miss Amy Hewes, at that time Executive Secretary of the Committee on Women in Industry, had charge and general supervision of the investigation which was begun in December, 1917. Miss Harriet Anderson gathered practically all the material for the report and visited the families in their homes. Miss Hewes prepared the preliminary report which was first submitted to the Quartermaster General April 3, 1918. When it was decided to publish the report, Miss May Allinson, Executive Secretary of the Committee, again visited the depot June 4th and 5th, brought the report up-to-date and prepared it for publication with the co-operation of the Committee on Publication.

This report of the investigations of conditions in Jeffersonville and the surrounding neighborhood is published through the courtesy of the Quartermaster General's Office.

FLORENCE J. HARRIMAN, *Chairman,*
Committee on Women in Industry.

July 10, 1918.

THE MANUFACTURE OF ARMY SHIRTS UNDER THE HOME WORK SYSTEM IN JEFFERSONVILLE, INDIANA.

Recommendations.

The Committee on Women in Industry after investigating the manufacture of army shirts under the home work system in Jeffersonville, Indiana, and after considering the facts presented in this report makes the following recommendations:

A. The first logical step is:

(1) That the Board of Administration of Labor Standards for Army Clothing in the Office of the Quartermaster General should be given jurisdiction over the manufacture of army shirts, whether in factories or in homes, and

(2) That this Board should be allowed to formulate the Government's policy as to the manufacture of shirts along lines similar to those adopted for the making of uniforms.

B. The Committee calls attention to the following facts:

(1) The waste of time and services in a system of production which requires 21,000 workers in the home to produce a similar amount to that done by 3,000 workers in the factory;

(2) The low hourly rates realized by the home workers which are far below Government rates paid for similar work done in the factories;

(3) The impossibility of adequate supervision of the sanitary conditions under which the shirts are made;

(4) The unnecessary congestion of transportation due to shipping materials and completed garments to and from the sub stations and also to the 21,000 workers carrying their bundles back and forth from the depots to their homes;

(5) Giving out army shirts to be made in the homes at a low rate of compensation is not the best and safest way to get the shirts for the soldiers nor is it the best way of relieving need and poverty. Home work rather perpetuates poverty since it carries an inadequate compensation.

In view of these facts, the Committee recommends that the home work system should not be further extended and that immediate plans should be made for substituting the manufacture of the shirts in the factories.

INTRODUCTION.

Scope. This report is concerned with the manufacture of army shirts cut and given out at the Quartermaster's Depot in Jeffersonville, Indiana, and made up by women in their homes.

Sources of Information. The data were secured (1) from conferences with the Depot Quartermasters on January 8th, February 4th and June 4th and 5th, 1918; (2) from inspections of the depot in company with the officers in charge of the manufacture of clothing; (3) from visits to the substations in Louisville and Frankfort; (4) from individuals in Louisville, including clothing manufacturers, a public health nurse, and the President of the Kentucky Consumers' League; and (5) from visits to the homes of 193 women engaged in stitching the shirts, located as follows:

In Louisville, Ky.....	164
In Frankfort, Ky.....	10
In Pewee Valley, Ky....	19

The addresses for these visits were, for the most part, taken at random from the Government lists. In addition, some workers were visited at the suggestion of social agencies in Louisville or of other women shirt-workers.

CHAPTER I.

THE JEFFERSONVILLE DEPOT.

Location and Numbers Employed. The Jeffersonville Depot was established in the seventies, in the little town of Jeffersonville, Indiana, on the north side of the Ohio River and opposite Louisville. One ferry boat which plies back and forth from Louisville to Jeffersonville, making each landing about once every half hour, is the only direct means of getting from one city to the other by walking or by any sort of vehicle. An inter-city trolley car line connects Louisville and Jeffersonville. A bridge seven miles down the river connects New Albany and Louisville. Transportation of the several thousand workers to the depot is a most serious problem. Since the beginning of the present war large yards for storing supplies and many new buildings have been added. The production of army shirts by women working at home has very rapidly increased. In January, 1918, the officials at the depot stated that shirts were being given out to a list of approximately 21,000 women. Ordinarily about 15,000 of these women receive work from the sub-station located in Louisville.

The number of **active** operatives varies from week to week. During the week of February 4th, at which time a cloth shortage prevailed, the number of active operatives was stated to be 20,700, distributed as follows:

Louisville.....	10,000
New Albany.....	3,500
Jeffersonville.....	2,500
Frankfort.....	2,000
Madison.....	1,500
Scottsburg.....	1,200

The practice obtained at that time of allowing to each woman only one bundle (10 shirts) a week *in order to distribute the work as widely as possible*, and give employment to a large number. This method, which increases the time necessary for transportation and the chances of delay, obviously impedes production. Since the first report of the Committee to the Quartermaster General the number of home workers has been decreased. Those who do the best work are

retained and allowed to take out two bundles at a time. The workers may now return these as soon as completed and receive two additional bundles of shirts.

When the demand came for increased production and storage at the beginning of the war, the available labor in Jeffersonville, which had a population of 10,412 at the time of the Thirteenth Census, became wholly inadequate. Men and women were drawn from surrounding towns, including Louisville, in numbers sufficient to put a strain upon train and trolley facilities which made regular service almost impossible. Partly in order to relieve the congestion, a substation was opened in the Armory in Louisville, another in a commercial school building in New Albany, one in an old store house in Frankfort and in several other cities.

Growth of the Home Work System. The officers in charge of the depot expressed satisfaction with the home work system of manufacture because it offers an almost inexhaustible source of labor supply for the depot and at the same time furnishes employment for many women whose family income is insufficient.

Both the Depot Quartermaster and the officer in charge of the Louisville substation, at the time of the visit in January, expressed the belief that the work should be so given out as to relieve the poor.

Home work has steadily been extended, in spite of the serious wastes inherent in production carried on in that way, in spite of unemployment existing in the clothing centers of the country during the past winter, and *contrary to the recommendations of the Quartermaster General in Standards of Employment in War Work: Summary of Recommendations to Employers, Circular No. 18, dated November 15, 1917* in which it is stated that:

“No work shall be given out to be done in rooms used for living purposes or in rooms directly connected with living rooms in any dwelling or tenement.”

The first objection to home work of this nature is that of its wastefulness at a time in the country's affairs when the most efficient production is imperative. This has to do specifically with the loss of time in transporting material, particularly when an effort is made to give only small amounts of work to each woman; the inevitable delays and losses on account of the separation of the workers from the inspectors and supervisors of the work such as those which occur when women have to travel back and forth from the factory several times in order to rectify minor errors in the make-up of a bundle of

pieces; and the great opportunity for poor workmanship and injury to the materials. In the second place, the employment of unskilled clothing workers drawn from an extended rural district is expensive when, in the clothing centers of the country, experienced workers who could doubtless perform the work far more quickly and efficiently, are idle.*

The recommendations of the Quartermaster General were undoubtedly made, not only with these facts in mind, but also in view of the danger of spreading diseases which is inherent in dwelling or tenement-house manufacture.

So great an extension of the home work system undoubtedly is a disorganizing factor in the clothing trade of the country. The output of the Louisville Substation alone was stated to be 17,000 to 20,000 shirts a day. In the long run the clothing trade in civilian shirts probably suffers a loss equivalent to such important increases in the manufacture of army shirts. Meanwhile the corresponding work, instead of going to the regular shirt factories, is performed in the homes. Clothing manufacturers in Louisville at first faced the necessity of closing the factories on account of dearth of orders.

*The chief men's clothing centers of the country, according to the 1914 Census of Manufacturers, (U. S. Bureau of the Census, Abstract of Census of Manufacturers, 1914, p. 269) are New York, Chicago, Baltimore, Philadelphia and Rochester. In New York, which in 1914 produced more than one-third of the value of the country's product, the garment trades were reported by the Federal Employment Service to be laying off workers during the winter of 1917-18. Official Bulletin January 11, 1918, p. 4.) Early in January, 1918, an official of the Pennsylvania State Federation of Labor stated that it had been reported to him that about 3,000 garment workers in Philadelphia were idle on account of lack of work. (Correspondence with H. M. Semple, Pennsylvania Department of Labor and Industry.)

CHAPTER II.

MAKING THE SHIRTS UNDER THE HOME WORK SYSTEM.

The Distributing System.

The Character of the Work. The principal product of home work manufacture at the Jeffersonville Depot is the army shirt, but overalls and bed sacks are also given out. Materials for all these are received at the Jeffersonville Depot. Here they are cut and tied into bundles. Practically all the cutting is done by electric machines through many layers of folded cloth. The cutters are men who earn from \$90.00 to \$250.00 a month on piece work.

Each shirt is made from 27 pieces and the shirts are in five different sizes. Moreover, the pieces of khaki cloth are not uniform in shade. According to the workers, mistakes frequently occur in assembling the 270 pieces which should be in each woman's bundle. The workers must then bring back the material and lose the time of the extra trip. Many of the women complained that their bundles contained pieces which did not match and they lost much time in returning the material to the station before they could get the right shade to complete their garment. Badly cut pieces, due to the occasional twisting of the cloth in the cutting, are another cause necessitating a return to the factory before the work can be finished.

Demonstrators were at hand at the giving-out stations to teach the method of making up the garments. A new worker is allowed to take home a sample shirt from which to learn. Women who are familiar with sewing can learn the process from the demonstrator or from the sample. The unskilled women learn from their more experienced neighbors, or from their own mistakes. The ordinary domestic sewing machines are used. It was stated that a motor attachment, costing \$15.00, made it possible to make twice as many shirts in the same length of time, but few workers possessed them. Only two of the 193 workers visited had machines with motors.

Work on the bed sacks and denim jackets is much heavier. It is not popular with the women workers who object to the delay and expenses caused by broken needles on the heavy material.

The prices paid for the articles manufactured are as follows:

\$4.45 per bundle* of 10 Olive Drab Shirts, or 44½ cents per shirt;

\$3.45 per bundle of 10 Denim Jumpers, or 34½ cents per jumper;

\$3.45 per bundle of 10 Denim Trousers, or 34½ cents per pair;

\$1.50 per bundle 10 Mattress Covers, or 15 cents per cover;

\$1.20 per bundle 10 Bed Sacks, or 12 cents apiece.

This price for making shirts has not been changed during the last ten or twelve years, although Government wage rates for making clothing inside the factory have been raised again and again and although several changes have been made in the styles of the shirt. The inside yoke or lining of white material has been added, the pencil pocket and the round patch on the elbow of the sleeve. All these changes mean additional work and time spent in making the shirt.

The officials in charge of the depot maintain the home workers make a much better shirt than the factory and prefer the product of the home work system.

The approximate number of garments manufactured per week was stated on February 4th, 1918, to be:

Louisville Branch.....	65,000
New Albany Branch.....	25,000

Location of Workers' Homes. The following tabulation shows the distance from the New Albany Substation of the towns in which the women live who receive work from the substation:

Distances	Number of towns of specified distance from the substation
Less than 10 miles.....	4
10 miles and less than 20.....	15
20 miles and less than 30.....	15
30 miles and less than 40.....	13
40 miles and less than 50.....	15
50 miles and less than 60.....	7
60 miles and less than 70.....	6
70 miles and less than 80.....	1
80 miles and less than 90.....	5
90 miles and less than 100.....	—
100 miles and over.....	2
Total.....	83

* This is a slightly lower price than is paid for home work at the Schuylkill Depot in Philadelphia (\$4.50 per bundle.)

Only four of the 83 towns on the list are within ten miles and only 20 or about one-fourth are within twenty miles of the substation. The women from most of these towns have to travel 20 miles or more going to the substation and 20 miles or more going home again with a big heavy bundle or in some cases two bundles of shirts.

The following table shows the number of towns represented by the workers who receive work from the three largest substations:

Substation	Number of towns in which the workers lived
New Albany.....	83
Louisville.....	122
Frankfort.....	45
Total.....	250

The workers who took shirts home from the New Albany Substation represented 83 different towns; from the Louisville Substation 122 different towns; and from the Frankfort Substation 45 different towns.

This gives some conception of the great amount of traveling back and forth which is occasioned by the home work system. Each woman must bring in her own work to the depot and carry home the new bundle to be made up into shirts. The cut pieces must be shipped out to the substation and shipped back to the depot when completed.

The workers in some of the distant towns do not appear to make much out of the sewing. In two instances they stated that the money received from the work was nearly all spent on the railroad fare to the substation, but it made possible a trip to the city which could not have been taken otherwise. It is evident that in such cases the shirts are turned in only at such time as is convenient for making the trip. This often means that the shirts are greatly delayed in reaching the substation.

The Substations. The Louisville Substation is located in the Armory, and occupies most of the enormous floor space of the building. The room is divided into aisles on the general plan of the inspection room at Ellis Island. Each woman waits with her bundles until a number is shown above the desk of the 44 inspectors, indicating that one is ready to examine her work, and she then moves down one of the aisles to the long

tables, on the other side of which the inspectors stand. The bundles are opened and the work graded on a card which also shows the time the work was taken out and returned. About 900 women bring in their work during the course of the day. If the work is in need of correction, unless some radical change has to be made, the sewer may repair it on machines provided in the building to save the worker from carrying it home again. The "Trouble Desk" explains in detail what is wrong, gives advice and supplies extra pieces of goods when necessary. When the inspectors are not all busy some of them may also assist in the repairing. The worker cannot get her pay until her bundle is accepted, nor can she turn in part of her bundle; so that if she does her repairing at home all 10 shirts have to be carried back although only one may have failed to pass the inspectors. After her work has been graded, the worker then takes her card to the pay window where she receives her money in silver and then moves on to the place where new bundles are given out. If the worker declines to make the desired change, she turns in her bundles and loses her pass. The investigator at the first inspection in January reported that the worker who returned an incomplete bundle received no pay for it. At the time of the inspection in June, however, the worker was paid for the amount of work done on a bundle, according to the estimate of the officer in charge.

Both men and women inspect returned work. The women are listed as operative helpers and are paid only \$50.00 a month. The men, who do exactly the same work, receive \$80.00 to \$100.00 a month.

Agents for sewing machines, needles and motors, etc., are allowed to have stands in the Armory. They do not pay for this concession. The Government sells at cost bags suitable for carrying the bundles. Workers are encouraged to use them in order to protect the cloth. Shirts must be carried in a water-proof covering of some sort. Most of the women use black oil cloth covers into which the shirts are folded.

The substation at Frankfort, Kentucky, is situated in the old Capitol building. When it was visited (January 24, 1918) it had been open four months. Very few women were in the station, though quantities of packages of shirts and bed sacks were ready to go out. Signs on the wall urged women to show their patriotism by sewing army shirts. A woman was seen taking away an unwrapped bundle of shirts contrary to the injunction not to take bundles out without wrapping them.

Fumigation. The fumigating apparatus at Jeffersonville and at Louisville was inspected. In the Louisville station the inspectors spread the shirts on racks or tables behind them after examination. The racks are wheeled into the fumigating room at the end of the day and subjected to the fumes of formaldehyde during the night. Every garment is supposed to go through this process, but it is to be noted that the capacity of the fumigator at Louisville is 14,000 shirts, while 17,000 to 20,000 shirts are received each day. It is manifestly impossible for all shirts to be fumigated when the substation is receiving the normal number. The officer in charge of the fumigation said that it is effective in destroying vegetable germs only. The plant is not equipped with any means of applying steam to destroy the forms of animal life which may inhabit the garments. When the appearance of the shirts is suspicious, they are left for several days in the fumigating room. The medical officer in charge of the Jeffersonville Station is now making some investigations about the length of time necessary to thoroughly fumigate the shirts.

Inspection of Homes. Statement was made from the Jeffersonville office, January 16th, as follows:

"The total number of sewing operatives employed at the several stations being operated under the direction of this office is approximately 21,000 and the number of sanitary inspectors employed is 15."

At that time two of the 15 inspectors were women and received \$50.00 a month. The men received \$60.00. Each inspector is expected to make about 30 visits a day and keep the records of visits up to date.

The present medical officer is deeply impressed with the importance of adequate inspection and the danger from shirts made in unsanitary homes. He now has a force of 25 inspectors working directly under the Quartermaster's Corps who are investigating doubtful homes.

Red Cross stations are established in both the Jeffersonville and Louisville Stations. The nurses say they frequently take in and treat the women who have brought in their bundles.

The department has established three marks for denoting the condition in which a house is found as follows:

Class A—Entirely satisfactory and not to be re-inspected for at least six months.

Class B—Fair and to be inspected at an early date.

Class C—Unsatisfactory. A reasonable opportunity is given to change conditions and the pass necessary to take work out is forfeited if this is not done.

Thirty visits were made with the officer in charge of the Inspection Department of the Louisville district and with one of his staff. The investigator who accompanied the chief of the Inspection Department agreed with him in the classification of the homes visited and reported that in his explanations to the home workers of what was expected of them he was clear, kind, and decisive. The chief is accustomed to make visits to check up the work of his staff.

In the country and in the small towns the workers are given cards which they are asked to return after they have had a physician's signature to the statement that the condition of the house is sanitary. Notices in the substation in Frankfort stated that an inspector was to visit the homes, but no inspection had been made of any of the 10 homes visited January 24th, 1918. In Pewee Valley none of the 19 homes visited January 11th, 1918, had been inspected, but after the women had been working five months cards were distributed for them to sign. Even in the city of Louisville itself a woman who had been working for four years said that her home had not been inspected during that time.

The Louisville Substation receives a daily report from the City Health Department giving the location of contagious disease. Women who have sewing at any of these addresses receive the following notice:

"War Department
Office of the Depot Quartermaster
Jeffersonville, Ind.

. Address reply to Depot Quartermaster and quote File No.

From: Sanitation Bureau,
Substation Q. M. Depot, Louisville, Ky.

To:
Subject: Contagion.

1. THE CONTAGIOUS DISEASE (of.....)
at your home reported to this office, it is directed that you retain the shirts in your possession until your home has been thoroughly fumigated.

2. Please have the attending physician certify on the enclosed card (which requires no postage) that your home has been fumigated, mailing promptly to this office before returning work, that inspection may be made.

Respectfully,

Captain Q. M. U. S. R."

The substation calls in the sewing after it receives notice that the quarantine is lifted.

The Department of Sanitary Inspection in Louisville has charge of "delinquents." This term is used to designate the women who have kept work more than a month. After a month has elapsed the women are notified by mail to return the work and if they do not comply, they are visited by a sanitary inspector.

The Time Lost. The continuance of this method of manufacture which has become an industrial anachronism, because of the long delays inherent in it, is without justification at a time when the need for army uniforms is urgent. To the time consumed in distributing the goods to the substations and the transportation to the widely scattered homes of the workers must be added the unproductive time when the sewer is engaged in household and other tasks. In some cases the sewing was found to be a very secondary employment. The files in the sanitary inspector's office at Louisville contain the cards of a group of workers who must be visited at night because they are employed in factories or are away from home as domestic helpers during the day.

It is the rule that a bundle of shirts must be returned after two weeks, but they are frequently kept out much longer. One worker said that she asked at the substation if she should bring back unfinished a bundle she had had out for four weeks, and was told to keep it until she could finish it.

In addition to the delays and waste of time due to the scattering of the workers and their slowness in returning materials, account must also be taken of the fact that the process of home manufacture itself is of necessity a very slow one. In order to obtain the rate, the women visited were classified according to their output. The 173* women who gave their output were divided into groups of almost exactly even thirds. Fifty seven (32.9 per cent.) were able to make

* Seven of the 193 women visited were working on bed ticks and 13 were unable to make a definite statement as to the number of shirts they were able to make in a week.

just one bundle of 10 shirts each week; 60 (34.6 per cent.) were not able to complete the bundle in a week's time and the last third (32.4 per cent.) were able to make more than one bundle in a week. The difference in the number of shirts made is to be largely accounted for by the amount of time the women were able to devote to sewing, but also to the fact that some very slow workers were included. For some time previous to the study a cloth shortage had been the occasion of the rule that one worker should be allowed not more than 10 shirts a week, so that no one should be entirely without work. This rule in itself may have operated to reduce the number returned to the station. In any case it is evident at a time when the cloth shortage made it especially difficult to keep up the output a very considerable amount of material was held up in the workers' homes.

The workers visited often spoke of women whom they knew who were making a large number of shirts. These were followed up whenever possible and only seven women were found who could make more than 20 shirts a week regularly. Three were visited who claimed that they could occasionally make 30 shirts a week; two claimed they were able to make 40 in a week, and one woman said that she had once made 10 shirts between 3 A. M. and midnight, but that she would never try to do it again. On the other hand, instances were found of work that had been out a long time; in one case, three months; in five cases, more than one month.

Even the largest claims of the home workers as to the number of shirts they were able to make in one week (40) are below the ordinary output of the worker under factory organization. The consensus of opinion among inspectors and several of the workers who were questioned seemed to be that two bundles could be completed working 10 hours a day six days a week. Twenty shirts a week would net \$8.50 or an hourly rate of 14.8 cents which is much lower than present day rates of pay for this type of work. The foreman of the Jeffersonville factory, when army shirts were being made there, said that he thought one woman in the factory could make eight shirts a day or 48 shirts a week and the \$50.00 monthly rate would mean \$12.50 a week.

CHAPTER III.

THE SEWING WOMEN AND THEIR HOMES.

Composition of the Group. A difference in the making of army shirts in the homes in war times and home work under other auspices lies in the fact that the Government employees now include a considerable number on women in very comfortable circumstances who sew from patriotic motives. One of these was a member of the Kentucky State Committee on Women in Industry of the Council of Defense. She stated that the pay was so poor that only patriotic impulses led her to undertake the work, which she preferred to knitting. She said that she knew many of "the best women in the city" were stitching shirts. Another worker was a hotel-keeper and a third was making payments on a home. At the other extreme are the very poor in whose favor it is the policy of the Louisville Substation to discriminate in giving out work. Some of these were receiving aid from the Associated Charities at the time the visits were made.

Character of the Poorer Dwellings. One family was living in squalid surroundings in an old barn. Equally undesirable dwellings were occupied by the workers who lived in the "shanty boats" along the banks of the river. The shanties are picturesque, but many of them are unsuited for human habitation. They are entirely without sanitary conveniences and are situated on low ground which is covered with water at the flood season when some of them are actually afloat. One of the houses contained four rooms in two of which chickens and a pig were kept at the time the Government sewing was done.

The colored workers in Pewee Valley live in cabins, many of which are dirty, in poor repair and without conveniences. Rural occupations are combined with the Government stitching. At the time of the visit, one worker who was about 18 years old had been engaged for the previous two weeks in hog killing. Her family consisted of herself, her husband, who was a farm hand, and two uncared-for children of two years and six months respectively.

Since the first report was submitted by the Committee to the Quartermaster General the officers at the Louisville Substation

report that the work has been taken out of all such homes and that a closer and more frequent inspection is now possible with the larger number of inspectors.

The Work Room. In no instance was a special room discovered, set apart for the stitching. In nearly two-thirds of the cases the work was done in either the kitchen or the bed-rooms. In five instances the workers lived and worked in a single room.

Comments about Work. In general the work was regarded as an opportunity which should be much appreciated, though it was not looked upon as easy. In order to make a success of it, the women said they must work steadily and have a good machine. Some women appeared to be working under a good deal of nervous strain. One hired another woman to make the fronts of the shirts for her. In only one case had the worker had previous experience in a stitching factory. Some had been in other factories, however, and two workers had determined to return to the factories in order to earn more. One had already gone back to a cigar factory where she intended to remain until the Government work was more plentiful.

A source of real dissatisfaction was the limit of one bundle of shirts a week, which since the first report of the Committee was submitted to the Quartermaster General, has been extended to two bundles. Some workers complained that others with "influence" were able to get more than they. One woman was using four passes in order to get a larger number of shirts. The passes were given her by "ladies" she worked for, who did not themselves want to sew any longer. She said there was no objection at the substation to this arrangement.

CHAPTER IV.

GENERAL SUMMARY.

Numbers Employed and Earnings. Approximately 21,000 women are making army shirts in their homes for the Quartermaster's Depot at Jeffersonville, Indiana.

The general agreement among the depot inspectors and among the women workers who were questioned at the depot was that two bundles of shirts a week constituted a standard output for a woman working 10 hours a day, six days a week, under the usual method of stitching on the ordinary foot-power sewing machines and making buttonholes by hand. The reports of the 193 women visited showed that one-third made one bundle of 10 shirts in a week; one-third made more and one-third less. Two-thirds, thus, did not reach this standard of two bundles a week.

Two bundles a week would net the woman working 60 hours a week a weekly income of \$8.90 or 14.8 cents an hour. This is far below the Government rate for seamstresses and power machine operators in other localities.

Seamstresses employed in making flags and life jackets in the Brooklyn Navy Yard and in sewing on wings in the Philadelphia Naval Aircraft Factory are rated at \$2.16, \$2.80 and \$3.20 per diem or at 27 cents, 36 cents and 40 cents an hour.

Power machine stitchers in the Jeffersonville Depot Uniform Factory earn from 26 to 36 cents an hour; in the Gas Mask Factory in Long Island City, 40 cents an hour and in the Philadelphia Naval Aircraft Factory, 45 cents an hour; all with pay and one-half for overtime (over eight hours).

This rate of \$4.45 a bundle of 10 shirts was established 10 or 12 years ago and has not been changed since, though several additional processes have been added, such as the lining of the yoke, the pencil pocket and the sleeve patch which is a difficult operation because it involves stitching a large circular piece on the sleeve at the elbow.

Only skilled seamstresses who know something of garment construction can properly sort 270 pieces in a bundle of 10 shirts and put together the 27 pieces which make up a shirt so it passes inspec-

tion. Many women try and fail and bring back their bundles, some scarcely begun, some partially completed and some impossibly done, so they must be ripped up, repaired or made over by the inspectors in the factory.

In the Jeffersonville factory, 48 shirts a week were made by a worker on a power machine. Two-thirds of the home workers visited did not make more than 10 shirts. By rule of the depot, a bundle of 10 shirts may be kept out two weeks, but in some cases, they are actually kept out much longer. The output per home worker is thus about one-fifth that of the factory worker as shown in the experience of two-thirds of the 173 women who gave their output and less than half the output of the factory worker when the home worker is employed a full week.

The workers and their work-places cover an area with radii of 100 miles. The workers must bring their bundles to town, and the inspectors must go out to their homes. During a "slow day" at the Louisville station over 700 women brought in their bundles. Twenty thousand women were employed to produce 142,000 shirts a week, which could be done by about 3,000 workers working under factory conditions.

But little definite information now exists as to the length of time, the best conditions and the efficiency of fumigation by formaldehyde. With the present uncertainty as to the transmission of contagious diseases, this phase of the home work manufacture is a matter of public interest.

An army doctor who keenly appreciates the danger of transmission of disease is devoting most of his time to the study of precautionary measures to protect the health of the wearers of the shirts. The number of inspectors has been doubled and yet, there are only 25 inspectors to inspect thousands of homes spread over many miles, which is a physical impossibility. The depot doctor is also carefully studying the system of fumigation. At present the shirts are hung in a fumigating room and subjected to the fumes of formaldehyde over night.

HOME WORK UNDESIRABLE.

A. From the Standpoint of Production.

The home work system of production has long been recognized as an inefficient and unsatisfactory method.

It means:

1. Spoiled material.
2. Impossibility of a uniform standard product.
3. Waste of time and services involved in sending back the completed garment.
4. Handwork on processes such as making buttonholes which can be done more rapidly by machine.
5. Delay and uncertainty in production since the workers in the main might be called casual workers who make it a supplementary occupation.

B. From the Standpoint of Public Welfare.

Health. Proper sanitary conditions of the work places are important for the general health of both worker and the soldier. This investigation shows the wide variation in sanitary conditions, the long hours and the low pay which usually accompany home work. It shows that the work is done in approximately 20,000 homes, ranging from very good homes to very poor unsanitary homes and that only 25 inspectors are employed to inspect these work places. The work is done under conditions contrary to the recommendations of the Quartermaster General opposing work done in rooms used for living purposes. The depot doctor regards the dangers from this home work system of manufacture as the most acute problem confronting the depot.

Congestion. In war time any delay in the production of army shirts for soldiers is a special matter of concern, as well as the increased congestion in transportation resulting from shipping great quantities to and from the substations and from thousands of workers carrying their bundles back and forth. Home work thus requires the services of abnormally large numbers of workers engaged in making, transporting, and inspecting the shirts, and inspecting the homes.

C. From the Standpoint of Social Welfare.

Home work is not a satisfactory solution of poverty or even of supplementing an inadequate income. The poor pay which characterizes home work rather tends to perpetuate poverty. The long hours necessary to make up a bundle of shirts at home, the strain of carrying the heavy bundles back and forth, make a heavy drain on the worker's strength, and the cost of traveling back and forth decreases the already inadequate compensation of the time spent in going for the materials, in making up the shirts and in taking them back to the depot.

